

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-15 (canceled)

Claim 16 (previously presented): A surface-mountable electrical circuit protection device comprising:

a first electrically insulative substrate having only one electrode disposed thereon;

a first PTC element comprised of a polymer with conductive particle dispersed therein and having a first end and a second end and a first surface and a second surface running therebetween;

a second electrically insulative substrate having a first end and a second end a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the second substrate extends to the second end of the second substrate but not the first end of the second substrate, the second electrode disposed on the second surface of the second substrate extends to the first end of the second substrate but not the second end of the second substrate;

a second PTC element comprised of a polymer with conductive particles dispersed therein and having a first end a second end and a first surface and a second surface running therebetween;

a third electrically insulative substrate having only one electrode disposed thereon;

the first PTC element positioned between the first and second supporting substrates such that: (i) the electrode disposed on the first substrate is also disposed on the first surface of the first PTC element and extends to the first end of the first PTC element but not the second end of the first PTC element; and (ii) the first electrode disposed on the second substrate is also disposed on the second surface of the first PTC element and extends to the second end of the first PTC element but not the first end of the first PTC element;

the second PTC element positioned between the second and third supporting substrates such that: (i) the second electrode disposed on the second substrate is also disposed on the first

surface of the second PTC element and extends to the first end of the second PTC element but not the second end of the second PTC element; and (ii) the electrode disposed on the third substrate is also disposed on the second surface of the second PTC element and extends to the second end of the second PTC element but not the first end of the second PTC element;

a first conductive end termination wrapping around a first end of the device; and
a second conductive end termination wrapping around a second end of the device.

Claim 17 (canceled)

Claim 18 (previously presented): The electrical device of Claim 16 wherein the first, second and third substrates are formed from a material selected from the group consisting of ceramic, FR-4 epoxy, glass, and melamine.

Claim 19 (original): The electrical device of Claim 16 wherein, the first and second PTC elements are electrically connected in parallel.

Claim 20 (original): The electrical device of Claim 16 wherein, the first and second end terminations are comprised of a first and a second conductive layer.

Claim 21 (original): The electrical device of Claim 20 wherein, the first conductive layer of the first and second end terminations is comprised of copper.

Claim 22 (original): The electrical device of Claim 20 wherein, the second conductive layer of the first and second end terminations is comprised of tin.

Claim 23 (original): The electrical device of Claim 16 wherein, the first conductive end termination is in direct contact with first electrode disposed on the third substrate and the first electrode disposed on the second substrate.

Claim 24 (original): The electrical device of Claim 23 wherein, the second conductive end termination is in direct contact with the second electrode disposed on the second substrate and first electrode disposed on the first substrate.

Claim 25 (original): The electrical device of Claim 24 wherein, when current flows through the device the current flows from the first conductive end termination to the first electrode disposed on the third substrate and the first electrode disposed on the second substrate, through the first and second PTC elements to the second electrode disposed on the second substrate and the first electrode disposed on the first substrate, to the second conductive end termination.

Claim 26 (previously presented): A surface-mountable electrical circuit protection device comprising:

- a first electrically insulating substrate having an electrode disposed on a first surface thereof;

- a second electrically insulating substrate having a first end and a second end and a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the second substrate extends to one of the first or second end of the second substrate but not the other of the first or second end of the second substrate and the second electrode disposed on the second surface of the second substrate extends to one of the first or second end of the of the second substrate but not the other of the first of or second end of the second substrate;

- a third electrically insulating substrate having a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof;

- a fourth electrically insulating substrate having a first electrode disposed on a first surface thereof;

- a first laminar PTC element comprised of a polymer having conductive particles dispersed therein, the first PTC element interposed between the first and second insulating substrates and electrically connecting the first electrode disposed on the first insulating substrate with the first electrode disposed on the second insulating substrate;

a second laminar PTC element comprised of a polymer having conductive particles dispersed therein, the second PTC element interposed between the second and third insulating substrates and electrically connecting the second electrode disposed on the second insulating substrate with the first electrode disposed on the third insulating substrate;

a third laminar PTC element comprised of a polymer having conductive particles dispersed therein, the third PTC element interposed between the third and fourth insulating substrates and electrically connecting the second electrode disposed on the third insulating substrate with the first electrode disposed on the fourth insulating substrate;

a first electrically conductive end termination wrapping around a first end of the device and electrically contacting the first electrode disposed on the fourth insulating substrate, the first electrode disposed on the third insulating substrate, and the first electrode disposed on the second substrate; and

a second electrically conductive end termination wrapping around a second end of the device and electrically contacting the second electrode disposed on the third insulating substrate, the second electrode disposed on the second insulating substrate, and the first electrode disposed on the first insulating substrate.

Claim 27 (original): The circuit protection device of Claim 26 wherein, the first end termination is disposed on the first and fourth insulating substrates adjacent one end of the device.

Claim 28 (original): The circuit protection device of Claim 26 wherein, the second end termination is disposed on the first and fourth insulating substrates adjacent a second end of the device.

Claim 29 (original): The circuit protection device of Claim 26 wherein, the first electrically insulating substrate has a first end and a second end, the first electrode disposed on the first surface of the first electrically insulating substrate extends to the second end but not the first end of the first electrically insulating substrate.

Claim 30 (original): The circuit protection device of Claim 26 wherein, the second electrically insulating substrate has a first end and a second end, the first electrode disposed on the first surface of the second electrically insulating substrate extends to the first end but not the second end of the second electrically insulating substrate and the second electrode disposed on the second surface of the second electrically insulating substrate extends to the second end but not the first end of the second electrically insulating substrate.

Claim 31 (original): The circuit protection device of Claim 26 wherein, the third electrically insulating substrate has a first end and a second end, the first electrode disposed on the first surface of the third electrically insulating substrate extends to the first end but not the second end of the third electrically insulating substrate and the second electrode disposed on the second surface of the third electrically insulating substrate extends to the second end but not the first end of the third electrically insulating substrate.

Claim 32 (original): The circuit protection device of Claim 26 wherein, the fourth electrically insulating substrate has a first end and a second end, the first electrode disposed on the first surface of the fourth electrically insulating substrate extends to the first end but not the second end of the fourth electrically insulating substrate.

Claims 33-37 (canceled)

Claim 38 (previously presented): A surface-mountable electrical circuit protection device comprising:

A first electrically insulating substrate having an electrode disposed on a first surface thereof;

A second electrically insulating substrate having a first end and a second end a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the second electrically insulating substrate extends to the first end but not the second end of the second electrically insulating substrate and the second electrode disposed on the second surface of the second electrically

insulating substrate extends to the second end but not the first end of the second electrically insulating substrate;

A third electrically insulating substrate having a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof;

A fourth electrically insulating substrate having a first electrode disposed on a first surface thereof;

A first laminar PTC element comprised of a polymer having conductive particles dispersed therein, the first PTC element interposed between the first and second electrically insulating substrates and electrically connecting the first electrode disposed on the first electrically insulating substrate and with the first electrode disposed on the second electrically insulating substrate;

a second laminar PTC element comprised of a polymer having conductive particles dispersed therein, the second PTC element interposed between the second and third electrically insulating substrates and electrically connecting the second electrode disposed on the second electrically insulating substrate with the first electrode disposed on the third electrically insulating substrate;

a third laminar PTC element comprised of a polymer having conductive particles dispersed therein, the third PTC element interposed between the third and fourth electrically insulating substrates and electrically connecting the second electrode disposed on the third insulating substrate with the first electrode disposed on the fourth electrically insulating substrate;

a first electrically conductive and termination wrapping around a first end of the device and electrically contacting the first electrode disposed on the fourth electrically insulating substrate, the first electrode disposed on the third electrically insulating substrate, and the first electrode disposed on the second electrically insulating substrate; and

a second electrically conductive end termination wrapping around a second end of the device and electrically contacting the second electrode disposed on the third electrically insulating substrate, the second electrode disposed on the second electrically insulating substrate, and the first electrode disposed on the first electrically insulating substrate.

Claim 39 (previously presented): The circuit protection device of Claim 38 wherein the third electrically insulating substrate has a first end and a second end, the first electrode disposed on the first surface of the third electrically insulating substrate extends to the first end but not the second end of the third electrically insulating substrate and the second electrode disposed on the second surface of the third electrically insulating substrate extends to the second end but not the first end of the third electrically insulating substrate.

Claim 40 (previously presented): A surface-mountable electrically circuit protection device comprising:

- a first electrically insulating substrate having an electrode disposed on a first surface thereof;

- a second electrically insulating substrate having a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof;

- a third electrically insulating substrate having a first end and a second end and a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the third electrically insulating substrate extends to the first end but not the second end of the third electrically insulating substrate and the second electrode disposed on the second surface of the third electrically insulating substrate extends to the second end but not the first end of the third electrically insulating substrate;

- a fourth electrically insulating substrate having a first electrode disposed on a first surface thereof;

- a first laminar PTC element comprised of a polymer having conductive particles dispersed therein, the first PTC element interposed between the first and second electrically insulating substrates and electrically connecting the first electrode disposed on the first electrically insulating substrate with the first electrode disposed on the second electrically insulating substrate;

- a second laminar PTC element comprised of a polymer having conductive particles dispersed therein, the second PTC element interposed between the second and third electrically

insulating substrates and electrically connecting the second disposed on the second electrically insulating substrate with the first electrode disposed on the third electrically insulating substrate;

a third laminar PTC element comprised of a polymer having conductive particles dispersed therein, the third PTC element interposed between the third and fourth electrically insulating substrates and electrically connecting the second electrode disposed on the third electrically insulating substrate with the first electrode disposed on the fourth electrically insulating substrate;

a first electrically conductive end termination wrapping around a first end of the device and electrically contacting the first electrode disposed on the fourth electrically insulating substrate, the first electrode disposed on the third electrically insulating substrate, and the first electrode disposed on the second electrically substrate; and

a second electrically conductive end termination wrapping around a second end of the device and electrically contacting the second electrode disposed on the third electrically insulating substrate, the second electrode disposed on the second electrically insulating substrate, and the first electrode disposed on the first electrically insulating substrate.

Claim 41 (previously presented): The circuit protection device of Claim 40 wherein the second electrically insulating substrate has a first end and a second end, the first electrode disposed on the first surface of the second electrically insulating substrate extends to the first end but not the second end of the second electrically insulating substrate and the second electrode disposed on the second surface of the second electrically insulating substrate extends to the second end but not the first end of the second electrically insulating substrate.

Claim 42 (previously presented): A surface-mountable electrical circuit protection device comprising:

a first electrically insulating substrate having an electrode disposed on a first surface thereof;

a second electrically insulating substrate having a first end a second end and a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the second electrically insulating

substrate extends to the first end but not the second end of the second electrically insulating substrate and the second electrode disposed on the second surface of the second electrically insulating substrate extends to the second end but not the first end of the second electrically insulating substrate;

a third electrically insulating substrate having a first end and a second end and a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the third electrically insulating substrate extends to the first end but not the second end of the third electrically insulating substrate and the second electrode disposed on the second surface of the third electrically insulating substrate extends to the second end but not the first end of the third electrically insulating substrate;

a fourth electrically insulating substrate having a first electrode disposed on a first surface thereof;

a first laminar PTC element comprised of a polymer having conductive particles dispersed therein, the first PTC element interposed between the first and second electrically insulating substrates and electrically connecting the first electrode disposed on the first electrically insulating substrate with the first electrode disposed on the second electrically insulating substrate;

a second laminar PTC element comprised of a polymer having conductive particles dispersed therein, the second PTC element interposed between the second and third electrically insulating substrates and electrically connecting the second electrode disposed on the second electrically insulating substrate with the first electrode disposed on the third electrically insulating substrate;

a third laminar PTC element comprised of a polymer having conductive particles dispersed therein, the third PTC element interposed between the third and fourth electrically insulating substrates and electrically connecting the second electrode disposed on the third electrically insulating substrate with the first electrode disposed on the fourth electrically insulating substrate;

a first electrically conductive end termination wrapping around a first end of the device and electrically contacting the first electrode disposed on the fourth electrically insulating

substrate, the first electrode disposed on the third electrically insulating substrate, and the first electrode disposed on the second electrically insulating substrate; and

a second electrically conductive end termination wrapping around a second end of the device and electrically contacting the second electrode disposed on the third electrically insulating substrate, the second electrode disposed on the second electrically insulating substrate, and the first electrode disposed on the first electrically insulating substrate.